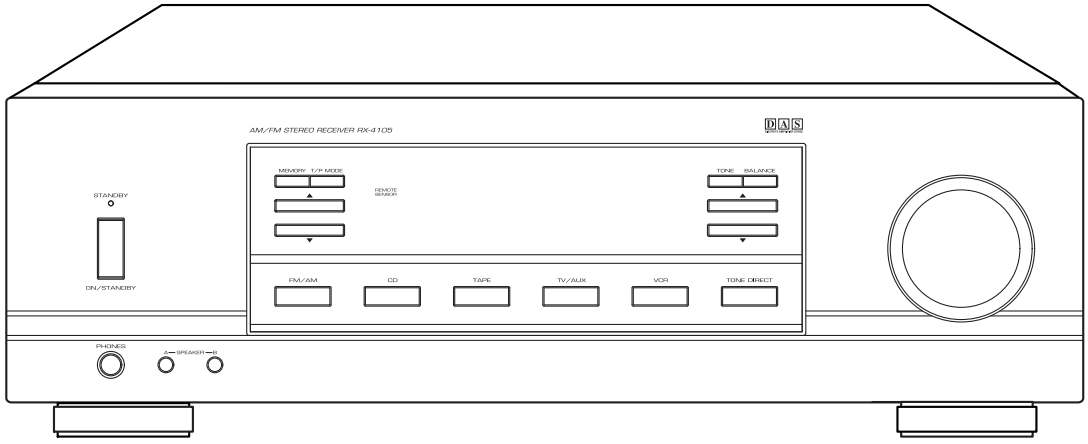
SERVICE MANUAL

RX-4105B/B

AM/FM STEREO RECEIVER



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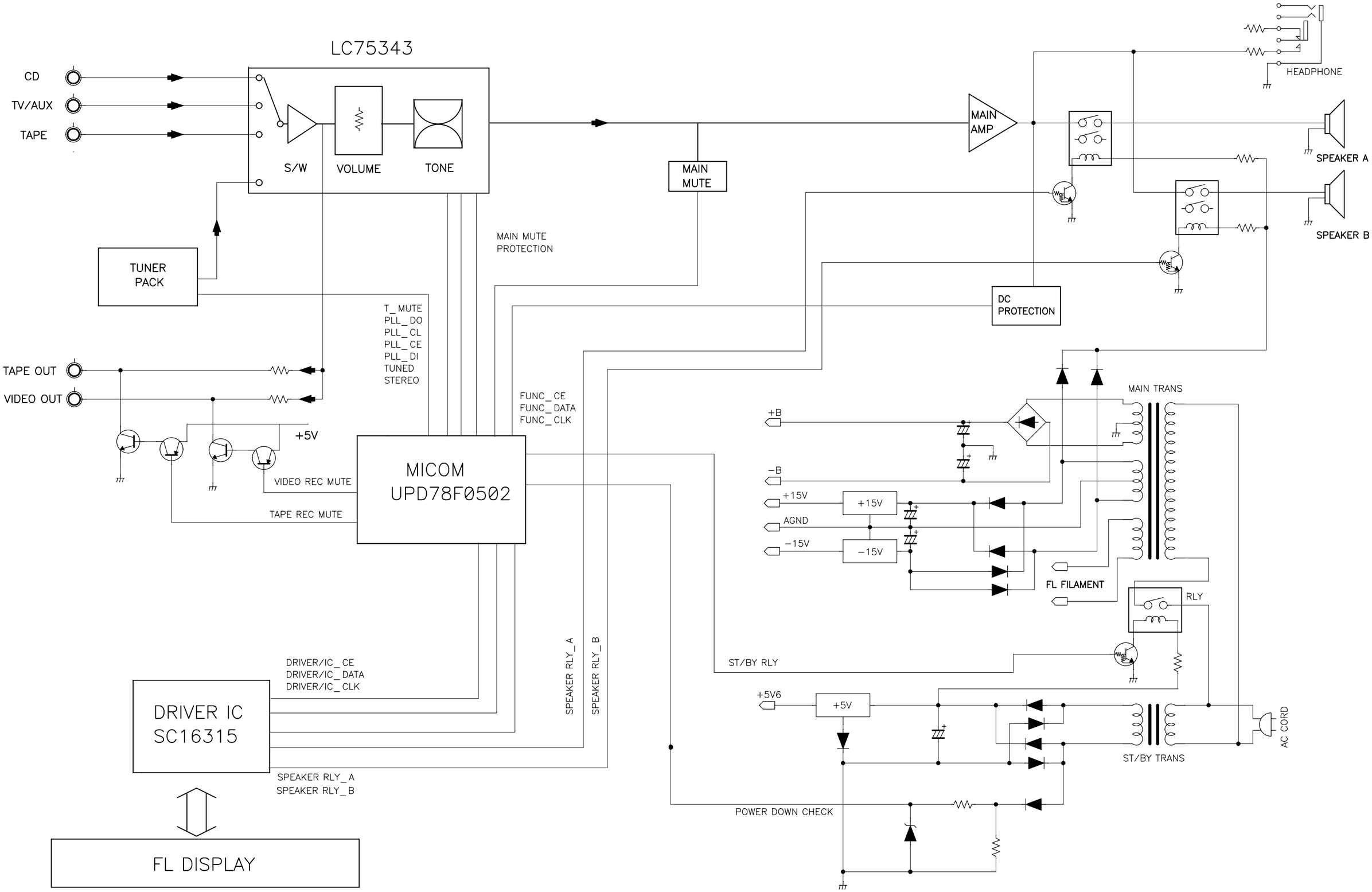
Sherwood®

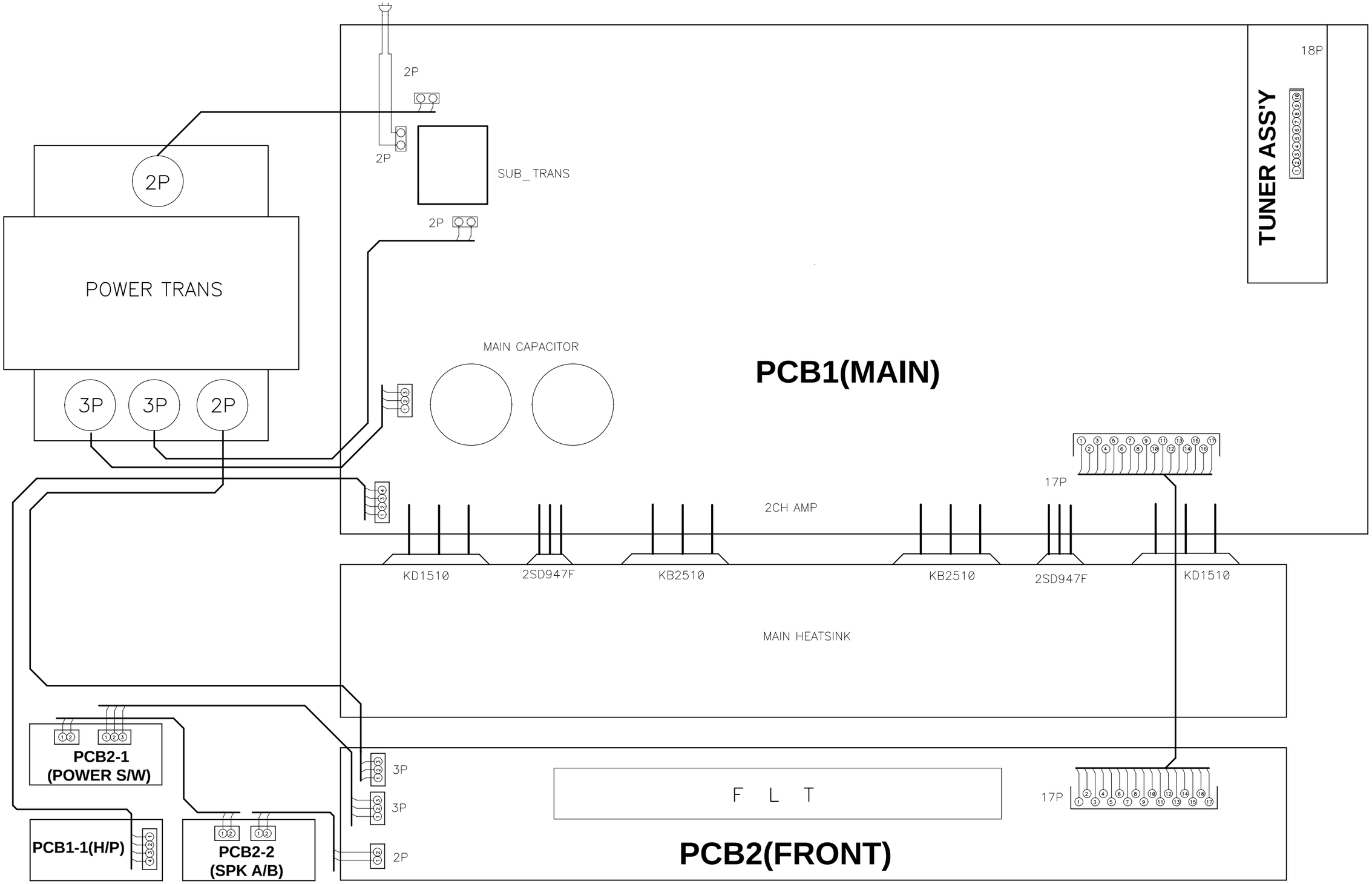
BLOCK DIAGRAM

Model : RX-4105B/B



WIRING DIAGRAM

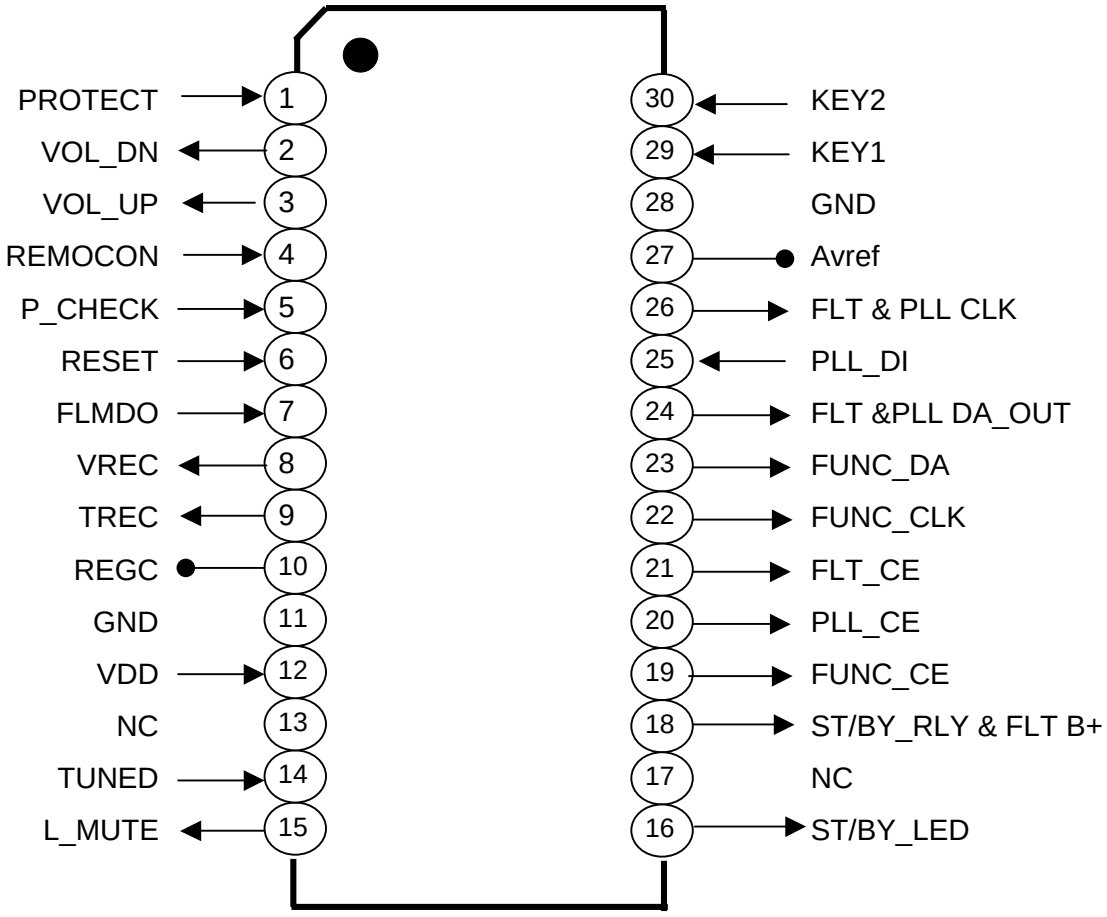
Model : RX-4105B/B



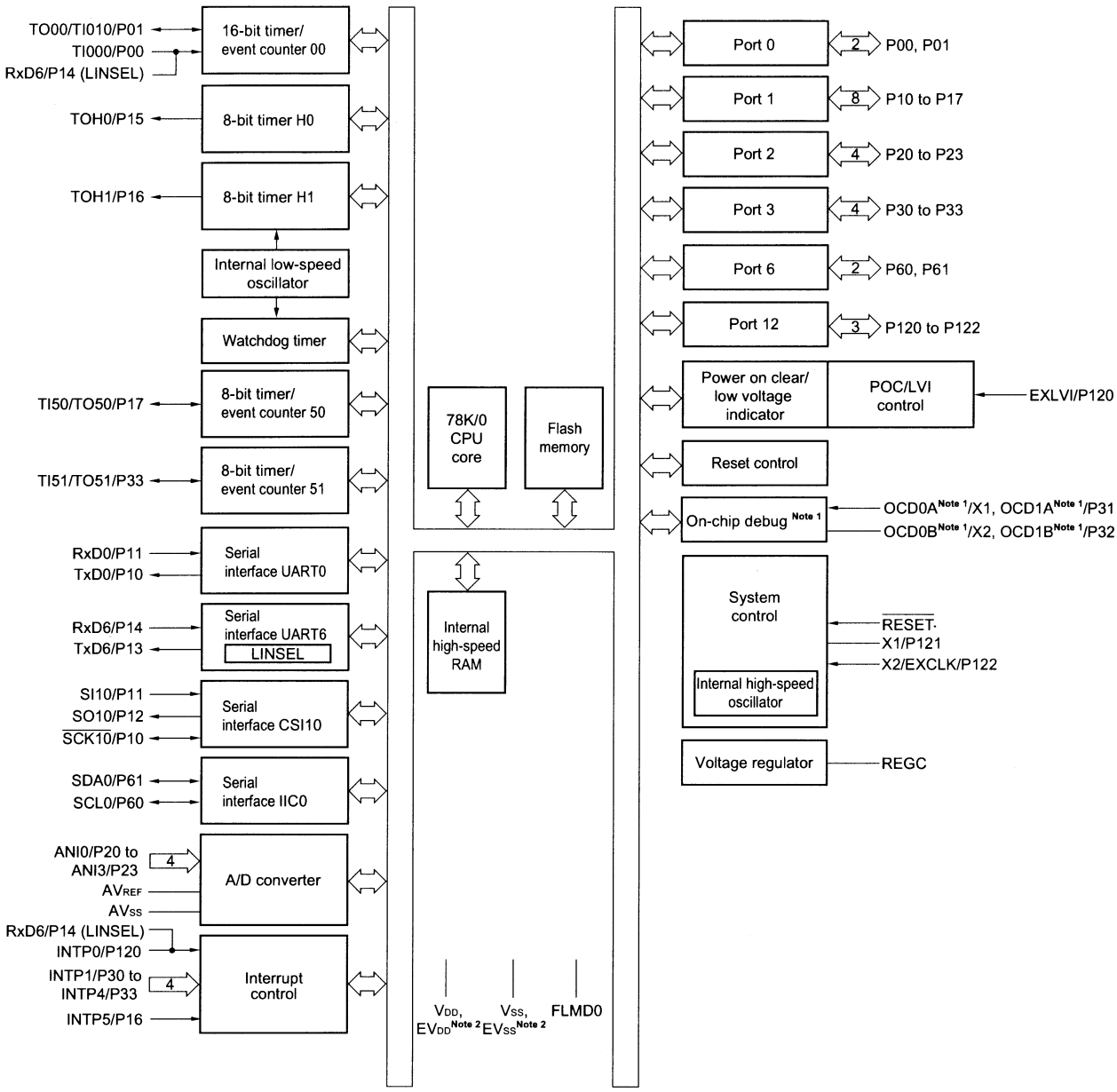
CIRCUIT DESCRIPTION

UPD78F0502M(T)5A4-A: IC301

1. Pin Description



1.6 Block Diagram



Notes 1. Available only in the μPD78F0503D (product with on-chip debug function).

★ **2.** Available only in the 36-pin plastic FLGA (FC-AA3 type).

3. Pin Functions

Pin No.	Pin Name	Opeation	Description	Assign
1	Protection	Input for detecting "PROTECTION" condition.	Protect in (High → Power off)	I
2	Volume_Encoder A	Input for main volume up/down.	Volume encoder up/down	I
3	Volume_Encoder B	Input for main volume up/down.	Volume encoder up/down	I
4	Remote control	Input for remocon data.	Remote control input	I
5	Power Check	Input for power down.	AC CORD ON/OFF CHECK (LOW=AC CORD OFF)	I
6	Reset	Input for resetting the CPU		I
7	FLMD0	Flash memory programming mode setting		I
8	V_REC	Output for "Video REC ON/OFF"		O
9	T_REC	Output for "Tape REC ON/OFF"		O
10	REGC	Connecting regulator output stabilization capacitance for internal operation.		
11	GND	GND		
12	VDD	+5V power supply		I
13	NC			
14	Tuned	Input for detecting "TUNED" condition.	Tuned signal in (Low=Tuned OK)	I
15	L-MUTE	Output for Front L/R MUTE		O
16	ST/BY LED	Output to drive standby LED		O
17	NC	open		
18	FLT B+ ST_BY RLY	Output for "power relay & FLT ON/OFF"	Output for "power relay & FLT ON/OFF"	O
19	LC75343_CE	Output for chip enable of LC75343 IC		O
20	PLL_CE		Tuner PLL Chip enable	O
21	FLT_CE		Driver IC Chip enable	O
22	LC75343_CLK	Output for clock of LC75343 IC		O
23	LC75343_DATA	Output for data of LC75343 IC		O
24	PLL_DO & FLT_DO		Tuner PLL & Driver IC Data out	O
25	PLL_DI		Tuner PLL Data in	I
26	PLL_CLK & FLT_CLK		Tuner PLL Clock & Driver IC Data out	O
27	AVREF	Reference voltage. (Connected to +5V, Not VDD.)		
28	GND	GND	GND	
29	KEY1	Data input for key scan.		I
30	KEY1	Data input for key scan.		I

TUNER ALIGNMENT

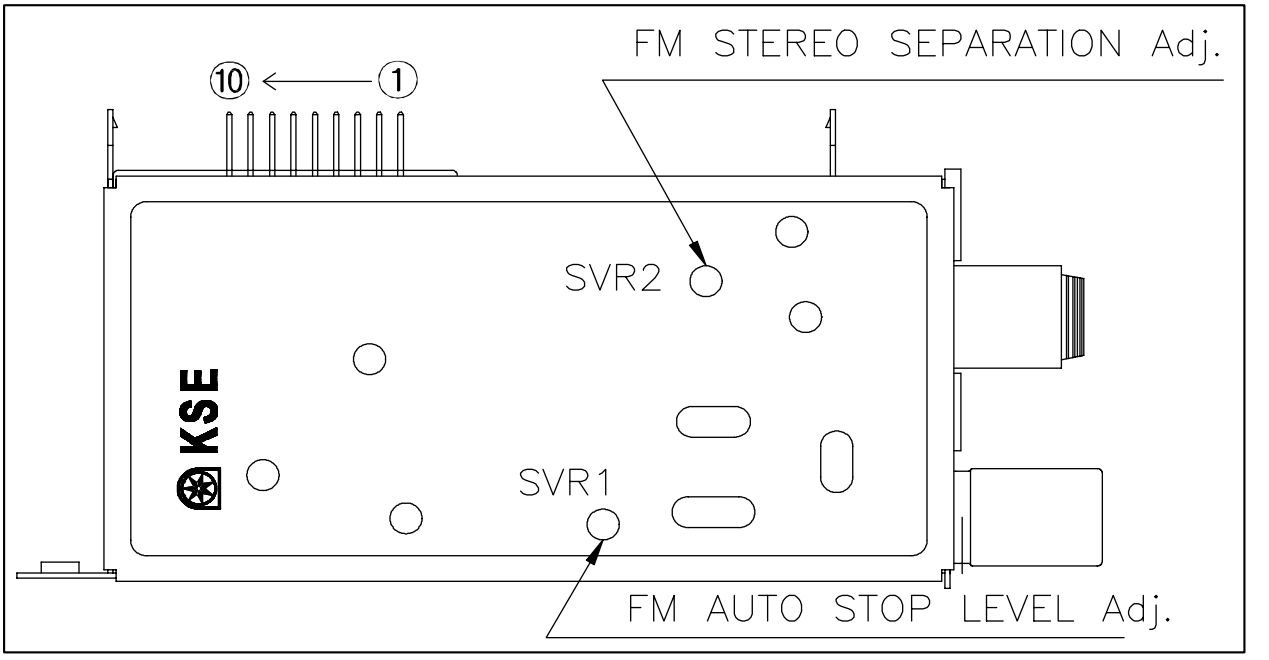
1. Electrical specification.

No.	ITEMS	SPECIFICATION	
		M W	F M
1-1	Local OSC	Above the receiving Frequency	
1-2	Frequency cover range	522 ~1620kHz	87.5 ~ 108.0MHz
1-3	Standard supply voltage	12 +/-0.5V	
1-4	FM Antenna Impedance	75 ohm unbalance	
1-5	AM Loop Antenna	9.5uH (1kHz) : S0160BL-25	

2. Electrical Characteristics.

No.	TEST ITEMS	TEST CONDITION	T.P.	T.L.	MOD.	Specification	UNIT	Adjustment
				dBu	kHz,%			
FM	AF Output Level	47kΩ Load	98.1	60	40	280±100	mV	Non Adjust
	Auto Stop Level		98.1	--		25 ±6	dBu	SVR01
	Stereo Separation	1kHz	98.1	60		25 min	dB	SVR02
MW	AF Output Level	47kΩ Load	999	74	30	180 ±60	mV	Non Adjust
	Auto Stop Level		999	--	30	55 ±15	dBu	Non Adjust

3. Adjust Point.



TROUBLESHOOTING

Symptom	Cause and Remedy	Ref NO.
Power On Failure.	A) AC-Cord check.	
1. FLT does not light up.	B) Power Trans (Main/ST-BY) check.	
2. ST-BY LED does not light up.	C) Fuse's disconnection check.	FUSE (101)
	D) Connector's disconnection or disjuction.	
	Change or close insertion of the connector.	CP (503)
	E) Inferior Stany-By switch.	SW (SW402)
	F) µ-COM I.C check.	
	1. µ-COM IC B+(5)V check.	IC301 Pin No. (12)
Fuse Disconnection.	A) Inferior transformer.	
(Power On)	B) AMP Drive Transistor out (POWER TR)	Q (306L/R, 307L/R)
	C) AMP Drive I.C out (POWER TR)	Q (305L/R)
Key Disorder.	A) KEY's being pushed check.	SW (400 ~ 417)
	B) KEY data check.	IC301 Pin No.(29, 30)
	C) µ-COM I.C inferior.	IC301
	1. µ-COM IC B+(5.5)V check	IC301 Pin No. (12)
Power Off in 2~3 sec.	A) Drive I.C out (POWER TR)	Q (306L/R, 307L/R)
after Power On.	B) Drive Transistor out (POWER TR)	Q (305L/R)
	C) Protection circuit check.	
	1. Output DC check.	R (537, 532)
	2. µ-COM I.C protection terminal check.	I.C301 Pin No. (1)
Bump Sound.	A) POWER MUTE transistor's out and inferior.	Q (315, 314L/R)
(During Input-Select Switch's change.)	µ-Com Front Mute Control PORT check.	IC301 Pin No. (15)
Sounds from Speaker.	A) HEADPHONE JACK connection inferior.	JACK (301)
when Headphone's connected .	B) DRIVER I.C inferior.	
	1. µ-Com H/P IN/OUT control "PORT"check.	IC400 Pin No. (3)
Bass Control Failure.	A) TONE VOLUME IC check.	IC601
Treble Control Failure.	1. Signal IN/OUT terminal.	I.C Pin No. (7, 31)
	2. IC voltage check (+10)V	I.C Pin No. (35)
	3. IC control data check.	I.C Pin No. (1, 2, 36)
AMP Sound dead.	A) Signal Mute TR's inferior.	Q (319, 314L/R)
1. L / R Channel dead.	B) Connector disconnection & disjunction.	FPC (101)
2. LEFT Channel dead.	Changer or close insertion of the connector.	
3. RIGHT Channel dead.	C) Speaker wire's disjuction.	
	Close insertion of the speaker wire.	
	D) Signal switching IC check.	I.C (601)
	1. IC voltage check (+10)V	I.C Pin No. (35)
	2. Switching IC control data check.	I.C Pin No. (1, 2, 36)
	3. Switching IC signal IN/OUT check.	I.C Pin No. (7, 31)

Symptom	Cause and Remedy	Ref NO.
Remote Controller Failure.	A) Battery check.	
	B) RMC I.C inferior.	
	1. RMC IC B+(5)V check.	REM401
	2. RMC clock pulse check.	IC301 (4)
FM Failure.	A) FM MUTE adjustment inferior.	
	B) FRONT-END inferior.	
	C) FM DET COIL inferior.	
	D)TUNER PACK check	PACK401(MAIN)
	1.TUNER PACK +12V check	Pin#4
	2.PLL control data check (DATA/CE/Clock)	Pin#5,6,7,8,9
	E) TUNER B+ voltage inferior	
	F) u-COM IC	IC301(MAIN)
	1.u-COM IC 5V check	I.C Pin No.(12)
	2. u-COM control DATA check	I.C Pin No.(20, 24, 25, 26)
Stereo Effect Failure. Stereo does not light up.	A) FM DET COIL Inferior.	
	B)TUNER PACK check	PACK401(MAIN)
	1.TUNER PACK +12V check	Pin#4
	2.PLL control data check (DATA/CE/Clock)	Pin#5,6,7,8,9
	C) STEREO adjustment inferior.	
	D) FM MUTE adjustment inferior.	
AM Failure.	A) AM V.T voltage inferior.	AM OSC (BLACK COIL)
	B)TUNER PACK check	PACK401(MAIN)
	1.TUNER PACK +12V check	Pin#4
	2.PLL control data check (DATA/CE/Clock)	Pin#5,6,7,8,9
	C)TUNER B+ voltage inferior	
	D)AM OSC COIL inferior	
	E) u-COM IC	IC301(MAIN)
	1.u-COM IC 5V check	I.C Pin No.(12)
	2. u-COM control DATA check	I.C Pin No.(20, 24, 25, 26)
Tuner Sound Dead. 1. L / R Channel dead. 2. LEFT Channel dead. 3. RIGHT Channel dead.	A) Connector's disconnection or disjuction.	
	Change or Close insertion of the connector.	
	B) AM/FM IF IC check	
	1.Signal IN/OUT terminal	
	2.IC driving voltage check (+12)	
	C) FM DET COIL inferior.	
	D) AM IFT COIL inferior.	
	E)TUNER PACK check	PACK401(MAIN)
	1.TUNER PACK +12V check	Pin#4
	2.PLL control data check (DATA/CE/Clock)	Pin#5,6,7,8,9

★ MECHANICAL PARTS LIST (RX-4105B/B)

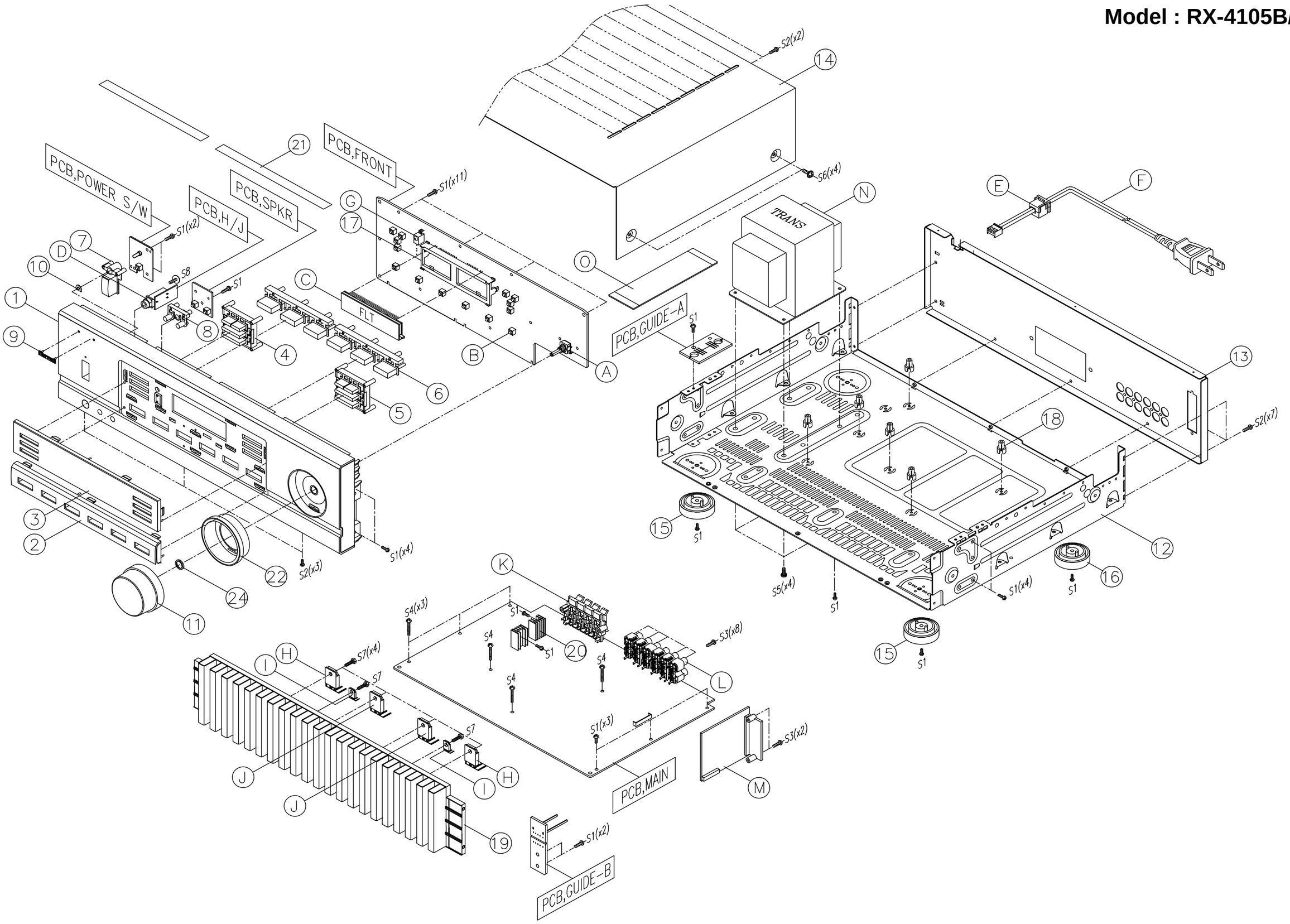
♣ **Parts without Parts No. are not supplied.**

No.	DESCRIPTION	Q'TY	PARTS No.
	PACKAGE		
	INSTRUCTION MANUAL	1	5707000000890S
	WARRANTY CARD	1	5727000000200S
	BOX,INNER CARTON	1	6017040120831S
	CUSHION,SNOW	1	6230043714010S
	PE,SHEET(750*1460/SET)	1	6327040059000S
	POLY BAG, 330*240*0.05	1	6337040062010S
	REMOCON, RC101	1	8300355100010S
	ANTENNA, LOOP	1	E601016000010S
	ANTENNA, WIRE(FM)	1	E605010070001S
	BATTERY, AAA	2	G670001R50210S
	CABINET & CHASSIS		
1	PANEL, FRONT	1	3067211361111S
2	DECORATION, COVER	1	5127210201031S
3	WINDOW, DISPLAY	1	5077210653020S
4	BUTTON, 4KEY(A)	1	5090211461100S
5	BUTTON, 4KEY(B)	1	5090211461100S
6	BUTTON, 3-KEY	2	5090211441000S
7	BUTTON, POWER TACT	1	5090211431000S
8	BUTTON, SPKR	1	5090211451000S
9	BADGE, SHERWOOD('S'-X)/GOLD	1	5630210051000S
10	INDICATOR, GUIDE LED	1	5160041003010S
11	KNOB, VOLUME	1	5080210191400SZ
12	CHASSIS, MAIN	1	3200200026020S
13	CHASSIS, BACK	1	3207210866C00S
14	CABINET, TOP	1	3007041236060S
15	FOOT, GOLD H/STAMPING/ASSY	2	4007040201040S
16	FOOT, PL	2	4000040201010S
17	HOLDER	1	432004078301AS

No.	DESCRIPTION	Q'TY	PARTS No.
18	SPACER, KNOB	6	4300040561010S
19	HEAT SINK, POWER	1	2120200088020S
20	HEAT SINK, REG TR(24X45)	1	2120044298010S
21	FELT, STRIP	2	2690040057010S
22	RING, DECORATION	1	4700210071100S
24	SPRING, KNOB	1	3720210116000S
A	SW, ENCODER	1	G121123070010S
B	SW,TACT	1	G180000270010S
C	DISPLAY, FLT	1	K530121300010S
D	JACK,D6.5	1	G402040161330S
E	STOPPER, DACH-1	1	4380040162010S
F	CORD ASS'Y, 10A/125V	1	L068125100020S
G	MODULE, REMOCON	1	E940343800010S
H	KTD1510, NPN	2	J503151000020S
I	2SD947F, NPN	2	J503947F00000S
J	KTB2510, PNP	2	J501251000010S
K	TER,BOARD PUSH 8P	1	G598801SA010YS
L	TER,RCA 6PIN	2	G603603BG105YS
M	TUNER, FM/AM	1	E903000000010S
N	POWER TRANS, 120V/60Hz	1	8200858690190S
O	CABLE,FLAT CARD 1.25MM	1	N712172144810S
	SCREWS		
S1	SCREW, +2S 3*8 B-TYPE ZNW/BH	33	B020030081B10S
S2	SCREW, +2S 3*8 B-TYPE BK/BH	1	B020030083B10S
S3	SCREW, +2S 3*10 B-TYPE(DOT) BK/BH	8	B020030103B11S
S4	SCREW, 3X18 B-TYPE ZNW/BH	6	B020030181B10S
S5	SCREW, +3S 4*10 P+S-WASHER ZNW/BH	4	B028940101B10S
S6	SCREW, +2S 4*8 B-TYPE BK/BH	4	B020040083B10S
S7	SCREW, ++2S 3*16+S-WASHER ZNW/HH	6	1507041146010S
S8	SCREW, +2S 3*8 ZnY WASHER PI12	1	1500001456010S

EXPLODED VIEW

Model : RX-4105B/B



★ ELECTRICAL PARTS LIST (RX-4105B/B)

♣ **Parts without Parts No. are not supplied.**

REF No.	DESCRIPTION				Q'TY	PARTS No.
PCB1	**ASSEMBLY P.C.BOARD MAIN**					**7025HK0708010**
	CAPACITORS					
C102L/R	ELECT GE 85C	4.7 uF	50V	M	2	D0404R7087250S
C103L/R	ELECT GE 85C	4.7 uF	50V	M	2	D0404R7087250S
C106L/R	ELECT GE 85C	4.7 uF	50V	M	2	D0404R7087250S
C107L/R	CERAMIC CHIP T.C	220 pF	50V	J	2	D010221167160S
C109L/R	ELECT GE 85C	4.7 uF	50V	M	2	D0404R7087250S
C110L/R	CERAMIC CHIP T.C	220 pF	50V	J	2	D010221167160S
C113L/R	ELECT GE 85C	4.7 uF	50V	M	2	D0404R7087250S
C114L/R	ELECT GE 85C	4.7 uF	50V	M	2	D0404R7087250S
C115L/R	ELECT GE 85C	4.7 uF	50V	M	2	D0404R7087250S
C116	ELECT GE 85C	22 uF	25V	M	1	D040220084050S
C117L/R	FILM POLYESTER	0.0027 uF	100V	J	2	D02027206C060S
C118L/R	FILM POLYESTER	0.1 uF	100V	J	2	D02010406C060S
C119L/R	FILM POLYESTER	0.1 uF	100V	J	2	D02010406C060S
C120	CERAMIC CHIP HIK	0.022 uF	50V	Z	1	D011223597160S
C121	ELECT GE 85C	22 uF	25V	M	1	D040220084050S
C122/C123	CERAMIC CHIP T.C	100 pF	50V	J	2	D010101167160S
C122L/R	ELECT GE 85C	4.7 uF	50V	M	2	D0404R7087250S
C124	CERAMIC CHIP HIK	0.022 uF	50V	Z	1	D011223597160S
C201	ELECT GE 85C	0.22 uF	50V	M	1	D040R22087070S
C202	CERAMIC HIK AXIAL	0.001 uF	50V	K	1	D005102177530S
C203	ELECT GE 85C	330 uF	10V	M	1	D040331082060S
C302L/R	ELECT GE 85C	10 uF	50V	M	2	D040100087070S
C303L/R	CERAMIC HIK AXIAL	680 pF	50V	K	2	D005681177520S
C304-C307	CERAMIC CHIP T.C	100 pF	50V	J	4	D010101167160S
C304L/R	CERAMIC HIK DISC	220 pF	500V	J	2	D00422106D05CS
C305L/R	CERAMIC T.C DISC	33 pF	500V	J	2	D00033006D050S
C306L/R	ELECT GE 85C	100 uF	10V	M	2	D040101082090S
C308L/R	CERAMIC HIK AXIAL	0.001 uF	50V	K	2	D005102177530S
C309L/R	ELECT GE 85C	47 uF	50V	M	2	D040470087070S
C310	CERAMIC CHIP HIK	0.022 uF	50V	Z	1	D011223597160S
C310L/R	ELECT GE 85C	10 uF	50V	M	2	D040100087070S
C311	CERAMIC CHIP HIK	1000 pF	50V	K	1	D011102777160S
C311L/R	CERAMIC HIK DISC	100 pF	500V	K	2	D00410106D050S
C312	CERAMIC CHIP HIK	0.022 uF	50V	Z	1	D011223597160S
C312L/R	CERAMIC HIK DISC	100 pF	500V	K	2	D00410106D050S
C313	CERAMIC CHIP T.C	100 pF	50V	J	1	D010101167160S
C313L/R	CERAMIC HIK AXIAL	0.022 uF	25V	Z	2	D005223594520S
C314L/R	FILM POLYESTER	0.047 uF	100V	J	2	D02047306C060S
C321	ELECT GE 85C	470 uF	10V	M	1	D040471082060S
C331	ELECT GE 85C	10 uF	50V	M	1	D040100087070S
C501	CERAMIC HIK AXIAL	0.1 uF	50V	Z	1	D005104597530S
C502	ELECT GE 85C	47 uF	50V	M	1	D040470087070S
C505/C506	FILM POLYESTER	0.1 uF	100V	J	2	D02010406C060S
C507/C508	FILM POLYESTER	0.047 uF	100V	J	2	D02047306C060S

REF No.	DESCRIPTION				Q'TY	PARTS No.
C509/C510	ELECT GE 85C	6800 uF	63V	M	2	D040682088010S
C511	ELECT GE 85C	1 uF	50V	M	1	D040010087150S
C512	ELECT GE 85C	470 uF	25V	M	1	D040471084130S
C513	ELECT GE 85C	1 uF	50V	M	1	D040010087150S
C514	CERAMIC AC(SAFETY)	0.0047 uF	250VAC		1	D00847208H010S
C517	ELECT GE 85C	1000 uF	35V	M	1	D040102085030S
C520-C522	FILM POLYESTER	0.047 uF	100V	J	3	D02047306C060S
C527	CERAMIC HIK AXIAL	0.047 uF	50V	Z	1	D005473597520S
C528	ELECT GE 85C	10 uF	50V	M	1	D040100087070S
C529	ELECT GE 85C	3.3 uF	50V	M	1	D0403R3087050S
C530	ELECT GE 85C	100 uF	25V	M	1	D040101084060S
C535	FILM POLYESTER	0.047 uF	100V	J	1	D02047306C060S
C536	ELECT GE 85C	470 uF	35V	M	1	D040471085210S
C542	CERAMIC HIK AXIAL	0.047 uF	50V	Z	1	D005473597520S
C543	CERAMIC HIK AXIAL	0.022 uF	25V	Z	1	D005223594520S
C550	CERAMIC HIK AXIAL	0.1 uF	50V	Z	1	D005104597530S
C601L/R	ELECT GE 85C	4.7 uF	50V	M	2	D0404R7087250S
C602	DOUBLE LAYER(70)	0.047 F	5.5V		1	D090473904010S
C602L/R	ELECT GE 85C	22 uF	25V	M	2	D040220084050S
C603	ELECT GE 85C	0.47 uF	50V	M	1	D040R47087050S
C603L/R	CERAMIC CHIP T.C	56 pF	50V	J	2	D010560167160S
C604	ELECT GE 85C	100 uF	10V	M	1	D040101082090S
C604L/R	CERAMIC CHIP HIK	560 pF	50V	K	2	D011561777180S
C605	ELECT GE 85C	1 uF	50V	M	1	D040010087150S
C606	ELECT GE 85C	2.2 uF	50V	M	1	D0402R2087160S
C607	ELECT GE 85C	1 uF	50V	M	1	D040010087150S
C609	ELECT GE 85C	47 uF	50V	M	1	D040470083080S
	CONNECTORS					
CP102	CN.WAFER 2.0MM (7P)				1	L101220070000S
CP301	CN.WAFER 2.0MM (4P)				1	L101220040000S
CP501	CN.WAFER 7.92MM				1	L108353280360S
CP501A	CN.WAFER 2.5MM (3P)				1	L102526700300S
CP502	CN.WAFER 7.92MM				1	L108353280290S
CP503	CN.WAFER 7.92MM				1	L108202000220S
FPC101	CN.FPC 1.25MM (17P)				1	L131111700010S
	DIODES					
D101-D103	1SS133T, SWITCHING				3	K000013300520S
D111/D112	KDS4148U, SWITCHING CHIP				2	K005041480030S
D114	KDS4148U, SWITCHING CHIP				1	K005041480030S
D301L/R	1SS133T, SWITCHING				2	K000013300520S
D302-D305	1SS133T, SWITCHING				4	K000013300520S
D307	1SS133T, SWITCHING				1	K000013300520S
D502-D505	1N4007, SWITCHING				4	K000400700010S
D514/D515	1SS133T, SWITCHING				2	K000013300520S
D516-D519	1N4007, SWITCHING				4	K000400700010S
D520	1SS133T, SWITCHING				1	K000013300520S
D521/D522	1N4007, SWITCHING				2	K000400700010S
D524	1SS133T, SWITCHING				1	K000013300520S
D525-D528	1N5408, RECTIFIER 1N				4	K040540800011S

REF No.	DESCRIPTION				Q'TY	PARTS No.
DZ101	MTZJ10B-0.5W, ZENER				1	K06010R044520S
DZ102	MTZJ13B-0.5W, ZENER				1	K06013R044520S
DZ201	MTZJ5.1B-0.5W, ZENER				1	K06005R144520S
DZ301	MTZJ4.3B-0.5W, ZENER				1	K06004R344520S
DZ501	MTZJ15B-0.5W, ZENER				1	K06015R044520S
DZ502	MTZJ4.3B-0.5W, ZENER				1	K06004R344520S
DZ513	MTZJ30B-0.5W, ZENER				1	K06030R044520S
	INTEGRATED CIRCUITS					
IC301	UPD78F0502MC(T)-5A4-A, CPU				1	J020780502540S
IC501	KIA7805API, LINEAR-REGULATOR				1	J126780500110S
IC502	KIA7815API, LINEAR-REGULATOR				1	J126781500000S
IC601	CF4558CB, LINEAR OP				1	J121455800150S
IC602	LC75343M, LINEAR EQ				1	J123753430010S
	TRANSISTORS					
Q101L/R	KTC2875B(MB), NPN				2	J5222875B0010S
Q102/Q103	KRA107S(PH), PNP				2	J5200107S0050S
Q104L/R	KTC2875B(MB), NPN				2	J5222875B0010S
Q201/Q202	KTC3198Y, NPN				2	J5023198Y0000S
Q203	KTA1266Y, PNP				1	J5001266Y0050S
Q301	KRC103S(NC), NPN				1	J522010300210S
Q302L/R	KSA992F, PNP				2	J5000992F0050S
Q303L/R	KSA992F, PNP				2	J5000992F0050S
Q304L/R	KTC3200BL, NPN				2	J5023200B0050S
Q308L/R	KTC3200BL, NPN				2	J5023200B0050S
Q313/Q314	KRC107M, PNP				2	J6020107M0010S
Q314L/R	KTC2875B(MB), NPN				2	J5222875B0010S
Q315	KRA107S(PH), PNP				1	J5200107S0050S
Q320	KRC107M, PNP				1	J6020107M0010S
Q501	KTA1273Y, PNP				1	J5001273Y0050S
Q502	KRC107M, PNP				1	J6020107M0010S
	RESISTORS					
R101L/R	CHIP THICK	220	ohm	1/16W J	2	C20002216M160S
R102L/R	CHIP THICK	100	kohm	1/16W J	2	C20001046M160S
R103L/R	CHIP THICK	220	ohm	1/16W J	2	C20002216M160S
R104L/R	CHIP THICK	100	kohm	1/16W J	2	C20001046M160S
R105L/R	CHIP THICK	220	ohm	1/16W J	2	C20002216M160S
R106L/R	CHIP THICK	100	kohm	1/16W J	2	C20001046M160S
R107L/R	CHIP THICK	220	ohm	1/16W J	2	C20002216M160S
R108L/R	CHIP THICK	10	kohm	1/16W J	2	C20001036M160S
R109L	CARBON FILM	100	ohm	1/5W J	1	C00001016P520S
R109R	CHIP THICK	100	ohm	1/16W J	1	C20001016M160S
R110L/R	CHIP THICK	220	ohm	1/16W J	2	C20002216M160S
R111L/R	CHIP THICK	100	kohm	1/16W J	2	C20001046M160S
R113L/R	CHIP THICK	100	ohm	1/16W J	2	C20001016M160S
R114L	CARBON FILM	3.3	kohm	1/5W J	1	C00003326P520S
R114R	CHIP THICK	3.3	kohm	1/16W J	1	C20003326M160S
R115L/R	CHIP THICK	220	ohm	1/16W J	2	C20002216M160S
R116L/R	CHIP THICK	10	kohm	1/16W J	2	C20001036M160S
R119L	CHIP THICK	3.3	kohm	1/16W J	1	C20003326M160S

REF No.	DESCRIPTION				Q'TY	PARTS No.
R119R	CARBON FILM	3.3 kohm	1/5W	J	1	C00003326P520S
R121L/R	CHIP THICK	7.5 kohm	1/16W	J	2	C20007526M160S
R201	CARBON FILM	4.7 kohm	1/5W	J	1	C00004726P520S
R202	CARBON FILM	3.3 kohm	1/5W	J	1	C00003326P520S
R203	CARBON FILM	22 kohm	1/5W	J	1	C00002236P520S
R204	CARBON FILM	560 ohm	1/5W	J	1	C00005616P520S
R205	CARBON FILM	6.8 kohm	1/5W	J	1	C00006826P520S
R206	CARBON FILM	10 kohm	1/5W	J	1	C00001036P520S
R212	CARBON FILM	100 ohm	1/5W	J	1	C00001016P520S
R213	METAL FILM 100PPM	22 ohm	1W	J	1	C060022065050S
R214	CARBON FILM	2.2 kohm	1/5W	J	1	C00002226P520S
R215	CARBON FILM	100 ohm	1/5W	J	1	C00001016P520S
R216/R217	CARBON FILM	1 kohm	1/5W	J	2	C00001026P520S
R218	CARBON FILM	100 ohm	1/5W	J	1	C00001016P520S
R219	CARBON FILM	1 kohm	1/5W	J	1	C00001026P520S
R304L/R	CARBON FILM	220 ohm	1/5W	J	2	C00002216P520S
R305L/R	CARBON FILM	33 kohm	1/5W	J	2	C00003336P520S
R306L/R	CARBON FILM	10 kohm	1/5W	J	2	C00001036P520S
R307L/R	CARBON FILM	470 kohm	1/5W	J	2	C00004746P520S
R308L/R	CARBON FILM	33 kohm	1/5W	J	2	C00003336P520S
R309L/R	CARBON FILM	1.5 kohm	1/5W	J	2	C00001526P520S
R310L/R	CARBON FILM	1.2 kohm	1/5W	J	2	C00001226P520S
R311L/R	CARBON FILM	470 ohm	1/5W	J	2	C00004716P520S
R312L/R	CARBON FILM	47 kohm	1/5W	J	2	C00004736P520S
R313L/R	CARBON FILM	1.5 kohm	1/5W	J	2	C00001526P520S
R314L/R	CARBON FILM	2.4 kohm	1/5W	J	2	C00002426P520S
R315L/R	METAL FILM 100PPM	5.6 kohm	1W	J	2	C060056265050S
R316L/R	METAL FILM 100PPM	5.6 kohm	1W	J	2	C060056265050S
R317L/R	METAL FILM 100PPM	4.7 ohm	1/4W	J	2	C0604R7063050S
R318L/R	METAL FILM 100PPM	100 ohm	1/4W	J	2	C060010163050S
R319L/R	METAL FILM 100PPM	4.7 ohm	1/4W	J	2	C0604R7063050S
R324L/R	CARBON FILM	3.6 kohm	1/5W	J	2	C00003626P520S
R325L/R	CARBON FILM	33 kohm	1/5W	J	2	C00003336P520S
R326L/R	CARBON FILM	5.1 kohm	1/5W	J	2	C00005126P520S
R327L/R	CARBON FILM	2.2 kohm	1/5W	J	2	C00002226P520S
R328L/R	METAL FILM 100PPM	10 ohm	1W	J	2	C060010065050S
R331	METAL FILM 100PPM	10 ohm	1W	J	1	C060010065050S
R341L/R	METAL FILM 100PPM	10 ohm	1W	J	2	C060010065050S
R342L/R	CARBON FILM	22 kohm	1/5W	J	2	C00002236P520S
R343L/R	METAL FILM 100PPM	560 ohm	1W	J	2	C060056165050S
R351L/R	CHIP THICK	220 kohm	1/16W	J	2	C20002246M160S
R352R	CHIP THICK	2.2 kohm	1/16W	J	1	C20002226M160S
R353L/R	CHIP THICK	470 ohm	1/16W	J	2	C20004716M160S
R355	CHIP THICK	3.3 Mohm	1/10W	J	1	C200033560200S
R356	CHIP THICK	220 kohm	1/16W	J	1	C20002246M160S
R357	CHIP THICK	47 kohm	1/16W	J	1	C20004736M160S
R358-R360	METAL FILM 100PPM	1.2 kohm	1W	J	3	C060012265050S
R361-R364	CHIP THICK	1 kohm	1/16W	J	4	C20001026M160S
R362L/R	CARBON FILM	1.8 kohm	1/5W	J	2	C00001826P520S

REF No.	DESCRIPTION					Q'TY	PARTS No.
R365	CHIP THICK	100	kohm	1/16W	J	1	C20001046M160S
R366	CHIP THICK	1	kohm	1/16W	J	1	C20001026M160S
R367	CHIP THICK	10	kohm	1/16W	J	1	C20001036M160S
R368	CHIP THICK	3.3	kohm	1/16W	J	1	C20003326M160S
R369	CHIP THICK	100	kohm	1/16W	J	1	C20001046M160S
R370	CARBON FILM	4.7	kohm	1/5W	J	1	C00004726P520S
R452/R453	CHIP THICK	10	kohm	1/16W	J	2	C20001036M160S
R454	CHIP THICK	47	kohm	1/16W	J	1	C20004736M160S
R455	CHIP THICK	10	kohm	1/16W	J	1	C20001036M160S
R501	CARBON FILM	2.2	kohm	1/5W	J	1	C00002226P520S
R508	METAL FILM 100PPM	560	ohm	1W	J	1	C060056165050S
R509	CARBON FILM	3.3	kohm	1/5W	J	1	C00003326P520S
R510	CARBON FILM	150	ohm	1/5W	J	1	C00001516P520S
R510L/R	CEMENT MPR	0.27	ohm	5W	J	2	C144R27069350S
R513	CARBON FILM	47	kohm	1/5W	J	1	C00004736P520S
R514	CARBON FILM	4.7	kohm	1/5W	J	1	C00004726P520S
R515	METAL FILM 100PPM	0.22	ohm	1W	J	1	C060R22065050S
R516	METAL FILM 100PPM	68	ohm	1/4W	J	1	C060068063050S
R518	METAL FILM 100PPM	560	ohm	1W	J	1	C060056165050S
R531-R533	CARBON FILM	51	kohm	1/5W	J	3	C00005136P520S
R534	METAL FILM 100PPM	2.2	Mohm	0.5W	J	1	C060022564520S
R535-R537	CARBON FILM	27	kohm	1/5W	J	3	C00002736P520S
R539	CARBON FILM	10	kohm	1/5W	J	1	C00001036P520S
R540/R541	METAL FILM 100PPM	0.22	ohm	1W	J	2	C060R22065050S
R601L/R	CHIP THICK	47	kohm	1/16W	J	2	C20004736M160S
R602L/R	CHIP THICK	910	ohm	1/16W	J	2	C20009116M160S
R603L/R	CHIP THICK	10	kohm	1/16W	J	2	C20001036M160S
R604L/R	CHIP THICK	180	kohm	1/16W	J	2	C20001846M160S
R606L/R	CHIP THICK	1	kohm	1/16W	J	2	C20001026M160S
	MISCELLANEOUS						
FUSE101	FUSE, T6.3A/250V					1	N751226301110S
GT4-GT6	TERMINAL					3	3790040886000S
J100-J106	CN,WIRE 1P					7	L045084006040S
J108-J112	CN,WIRE 1P					5	L045084006040S
J115-J125	CN,WIRE 1P					11	L045084006040S
J127-J146	CN,WIRE 1P					20	L045084006040S
J165-J168	CN,WIRE 1P					4	L045084006040S
J170-J173	CN,WIRE 1P					4	L045084006040S
J177	CN,WIRE 1P					1	L045084006040S
J180	CN,WIRE 1P					1	L045084006040S
J184	CN,WIRE 1P					1	L045084006040S
J191	CN,WIRE 1P					1	L045084006040S
J193	CN,WIRE 1P					1	L045084006040S
J198-J225	CN,WIRE 1P					28	L045084006040S
J227-J234	CN,WIRE 1P					8	L045084006040S
J244/J245	CN,WIRE 1P					2	L045084006040S
J247-J270	CN,WIRE 1P					24	L045084006040S
J272-J285	CN,WIRE 1P					14	L045084006040S
J287	CN,WIRE 1P					1	L045084006040S

REF No.	DESCRIPTION				Q'TY	PARTS No.
J289/J290	CN,WIRE 1P				2	L045084006040S
J292-J297	CN,WIRE 1P				6	L045084006040S
J300-J302	CN,WIRE 1P				3	L045084006040S
J304/J305	CN,WIRE 1P				2	L045084006040S
J308	CN,WIRE 1P				1	L045084006040S
J310/J311	CN,WIRE 1P				2	L045084006040S
J314-J316	CN,WIRE 1P				3	L045084006040S
J318B	CN,WIRE 1P				3	L045084006040S
J319	CN,WIRE 1P				1	L045084006040S
J321-J323	CN,WIRE 1P				3	L045084006040S
J324B	CN,WIRE 1P				1	L045084006040S
J325/J326	CN,WIRE 1P				2	L045084006040S
J333-J341	CN,WIRE 1P				9	L045084006040S
J348/J349	CN,WIRE 1P				2	L045084006040S
J351-J367	CN,WIRE 1P				17	L045084006040S
J370	CN,WIRE 1P				1	L045084006040S
J371	CHIP THICK	0 ohm	1/16W	J	1	C20000006M160S
J378	CHIP THICK	0 ohm	1/16W	J	1	C20000006M160S
J500	CN,WIRE 1P				1	L045084006040S
JACK101	TER,RCA 6PIN				1	G603603BG105YS
JACK102	TER,RCA 6PIN				1	G603603BG105YS
JACK104	TER,BOARD PUSH 8P				1	G598801SA010YS
L301L/R	INDUCTOR COIL, 0.5UH				2	D330R50000000S
P101-P104	HOLDER, PI5.2				4	G645000050010S
PACK401	TUNER, FM/AM				1	E903000000010S
RLY301-RLY303	RELAY, 24V 5A				3	G680240502030S
RLY501	RELAY, DC9V 250V/5A				1	G680090102010S
T502	POWER TRANS, 120V/60Hz				1	8200280150250S
	HEAT SINK, REG TR(24X45)				1	2120044298010S
	SCREW, +2S 3*8 B-TYPE ZNW/BH				1	B020030081B10S
PCB1-1	**ASSEMBLY P.C.BOARD HEAD PHONE**					
C317L/R	CERAMIC CHIP HIK	1000 pF			2	D011102777160S
C330	CERAMIC CHIP HIK	0.022 uF			1	D011223777160S
CN301	CN,WIRE 250MM (4P)				1	L000251040100S
GW2	RING,TER WIRE 120MM (1P)				1	8410121010020S
JACK301	JACK,D6.5				1	G402040161330S
R344L/R	CHIP THICK	10 ohm	1/16W	J	2	C20001006M160S
PCB1-2	**ASSEMBLY P.C.BOARD GUIDE®**					
CLAMP1	CLAMP				1	4330000120000S
J708-J712	CN,WIRE 1P				5	L045084006040S
PCB1-3	**ASSEMBLY P.C.BOARD GUIDE(L)**					
J701-J706	CN,WIRE 1P				6	L045084006040S
PCB2	**ASSEMBLY P.C.BOARD FRONT**					**7025HK0708011**
C400/C401	FILM POLYESTER	0.1 uF	100V	J	2	D02010406C060S
C402/C403	CERAMIC CHIP HIK	0.1 uF	50V	Z	2	D011104597160S
C404	ELECT GE 85C	22 uF	50V	M	1	D040220087060S
C405	CERAMIC CHIP HIK	0.1 uF	50V	Z	1	D011104597160S
C406	ELECT GE 85C	100 uF	10V	M	1	D040101082090S
C407	CERAMIC CHIP HIK	0.1 uF	50V	Z	1	D011104597160S

REF No.	DESCRIPTION				Q'TY	PARTS No.
C408/C409	CERAMIC CHIP T.C	100 pF	50V	J	2	D010101167160S
C410	ELECT GE 85C	47 uF	10V	M	1	D040470082060S
C411-C413	CERAMIC CHIP HIK	0.1 uF	50V	Z	3	D011104597160S
C414-C416	CERAMIC CHIP T.C	150 pF	50V	J	3	D010151167160S
CN401	CN,WIRE 100MM (2P)				1	L000101020120S
CN402	CN,WIRE 100MM (3P)				1	L000101030130S
CP401	CN.WAFER 2.5MM (2P)				1	L102526800200S
D400/D401	KDS4148U, SWITCHING CHIP				2	K005041480030S
DZ400	0.2W 6.2V, ZENER CHIP				1	K06606R24P400S
FLT	DISPLAY, FLT				1	K530121300010S
FPC400	CN.FPC 1.25MM (17P)				1	L131101700010S
GW1	RING,TER WIRE				1	8410141010010S
HOLDER	HOLDER				1	432004078301AS
IC400	SC16315, LINEAR-DRIVER				1	J127163150010S
J400	CN,WIRE 1P				1	L045084006040S
J401/J402	CHIP THICK	0 ohm	1/8W	J	2	C200000061300S
J403/J404	CN,WIRE 1P				2	L045084006040S
J405-J407	CHIP THICK	0 ohm	1/8W	J	3	C200000061300S
J408	CN,WIRE 1P				1	L045084006040S
J409/J410	CHIP THICK	0 ohm	1/16W	J	2	C20000006M160S
J411/J412	CHIP THICK	0 ohm	1/8W	J	2	C200000061300S
J413-J419	CN,WIRE 1P				7	L045084006040S
Q400	KRC107S, NPN				1	J5020107S0050S
Q401	KRA107S(PH), PNP				1	J5200107S0050S
Q402	KRC107S, NPN				1	J5020107S0050S
R400A	METAL FILM 100PPM	4.7 ohm	1W	J	1	C0604R7065050S
R403A	METAL FILM 100PPM	4.7 ohm	1W	J	1	C0604R7065050S
R404/R405	CHIP THICK	150 ohm	1/16W	J	2	C20001516M160S
R406-R433	CHIP THICK	56 kohm	1/16W	J	28	C20005636M160S
R434	CHIP THICK	390 ohm	1/16W	J	1	C20003916M160S
R435	CHIP THICK	15 kohm	1/16W	J	1	C20001536M160S
R436	CHIP THICK	8.2 kohm	1/16W	J	1	C20008226M160S
R437	CHIP THICK	8.2 kohm	1/16W	J	1	C20008236M160S
R438	CHIP THICK	27 kohm	1/16W	J	1	C20002736M160S
R439	CHIP THICK	4.7 kohm	1/16W	J	1	C20004726M160S
R440	CHIP THICK	15 kohm	1/16W	J	1	C20001536M160S
R441	CHIP THICK	3.3 kohm	1/16W	J	1	C20003326M160S
R442	CHIP THICK	8.2 kohm	1/16W	J	1	C20008226M160S
R443	CHIP THICK	2.2 kohm	1/16W	J	1	C20002226M160S
R444	CHIP THICK	4.7 kohm	1/16W	J	1	C20004726M160S
R445	CHIP THICK	1.5 kohm	1/16W	J	1	C20001526M160S
R446/R447	CHIP THICK	4.7 kohm	1/16W	J	2	C20004726M160S
R448	CHIP THICK	1 kohm	1/16W	J	1	C20001026M160S
R449	CHIP THICK	3.3 kohm	1/16W	J	1	C20003326M160S
R450	CHIP THICK	2.2 kohm	1/16W	J	1	C20002226M160S
R451	CHIP THICK	100 ohm	1/16W	J	1	C20001016M160S
R454-R458	CHIP THICK	470 ohm	1/16W	J	5	C20004716M160S
R459-R461	CHIP THICK	47 ohm	1/16W	J	3	C20004706M160S
R462	CHIP THICK	470 ohm	1/16W	J	1	C20004716M160S

REF No.	DESCRIPTION	Q'TY	PARTS No.
REM401	MODULE, NJL34H380A 38KHz	1	E940343800010S
SW403-SW410	SW, TACT(SKHV10920A)	8	G180000270010S
SW412-SW417	SW, TACT(SKHV10920A)	6	G180000270010S
VOL401	SW, ENCODER	1	G121123070010S
PCB2-1	**ASSEMBLY P.C.BOARD POWER S/W**		
CP400	CN.WAFER 2.0MM (2P)	1	L101220020000S
CP403	CN.WAFER 2.0MM (3P)	1	L101220030000S
LED400	LED	1	K500052101121S
SW402	SW,TACT(SKHV10920A)	1	G180000270010S
PCB2-2	**ASSEMBLY P.C.BOARD SPEAKER A/B**		
CN400	CN.WAFER 2.0MM (2P)	1	L101220020000S
CN403	CN,WIRE 100MM (2P)	1	L000101020120S
R401	CHIP THICK 1.5 kohm 1/16W J	1	C20001526M160S
R402	CHIP THICK 1 kohm 1/16W J	1	C20001026M160S
SW400/SW401	SW,TACT(SKHV10920A)	2	G180000270010S

SCHEMATIC DIAGRAMS(1)

PCB1(MAIN)

Model : RX-4105B/B

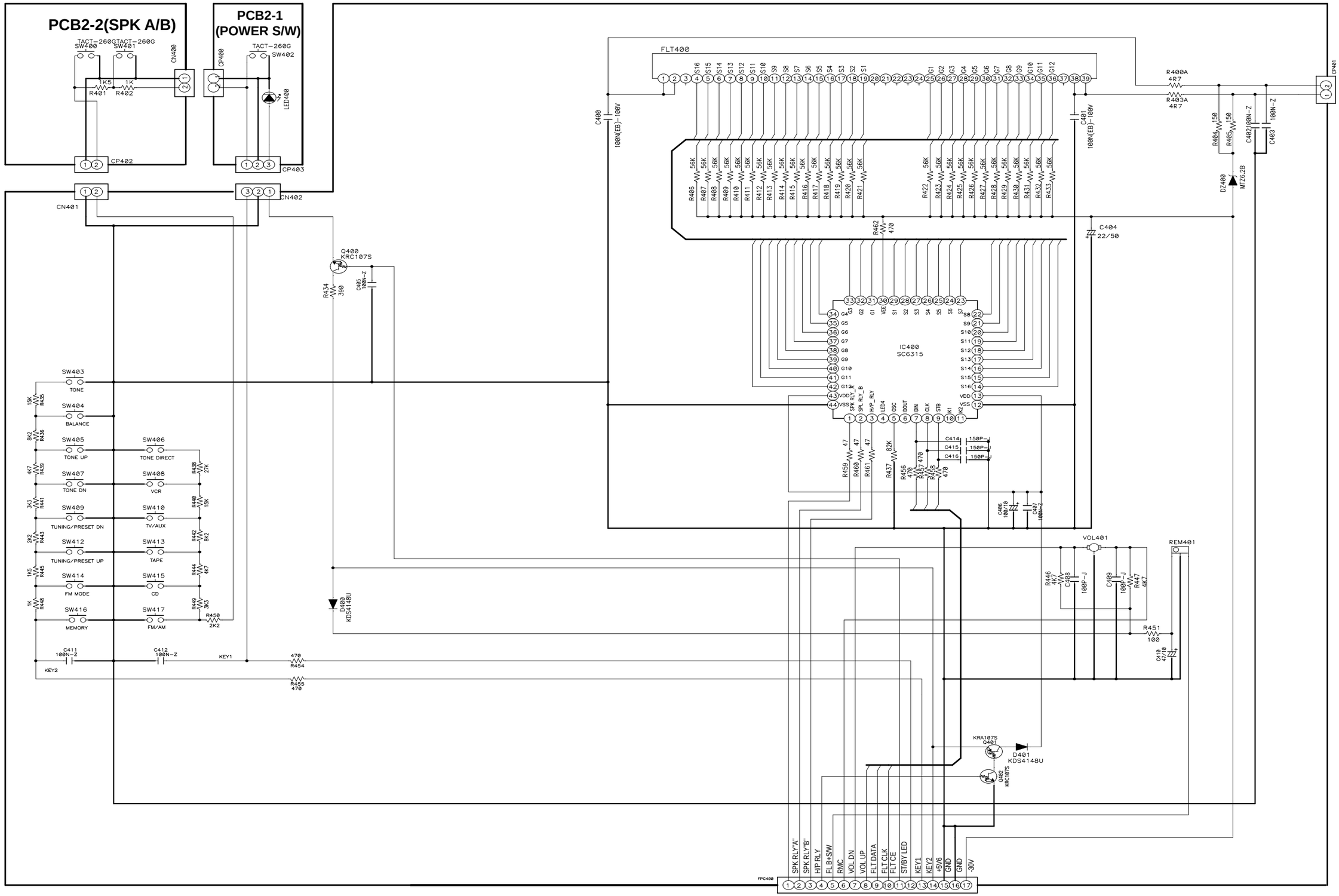
NOTES
1. Resistor values are indicated in ohms unless otherwise specified [k = 1,000 m = 1,000,000]
2. Capacitor values are indicated in microfarades unless otherwise specified. [p = micro-microfarades]
3. : These resistor are to be segregated from printed wiring board or other acessible parts.

CAUTION
Safety precaution to be followed during servicing
1] Since those parts marked with are critical parts for safety. use only the one described in the parts list
2] Before returning the set to the customer make appropriate leakage current or resistance measurements to determine the exposed parts are prorerly insulated from the supply circuit

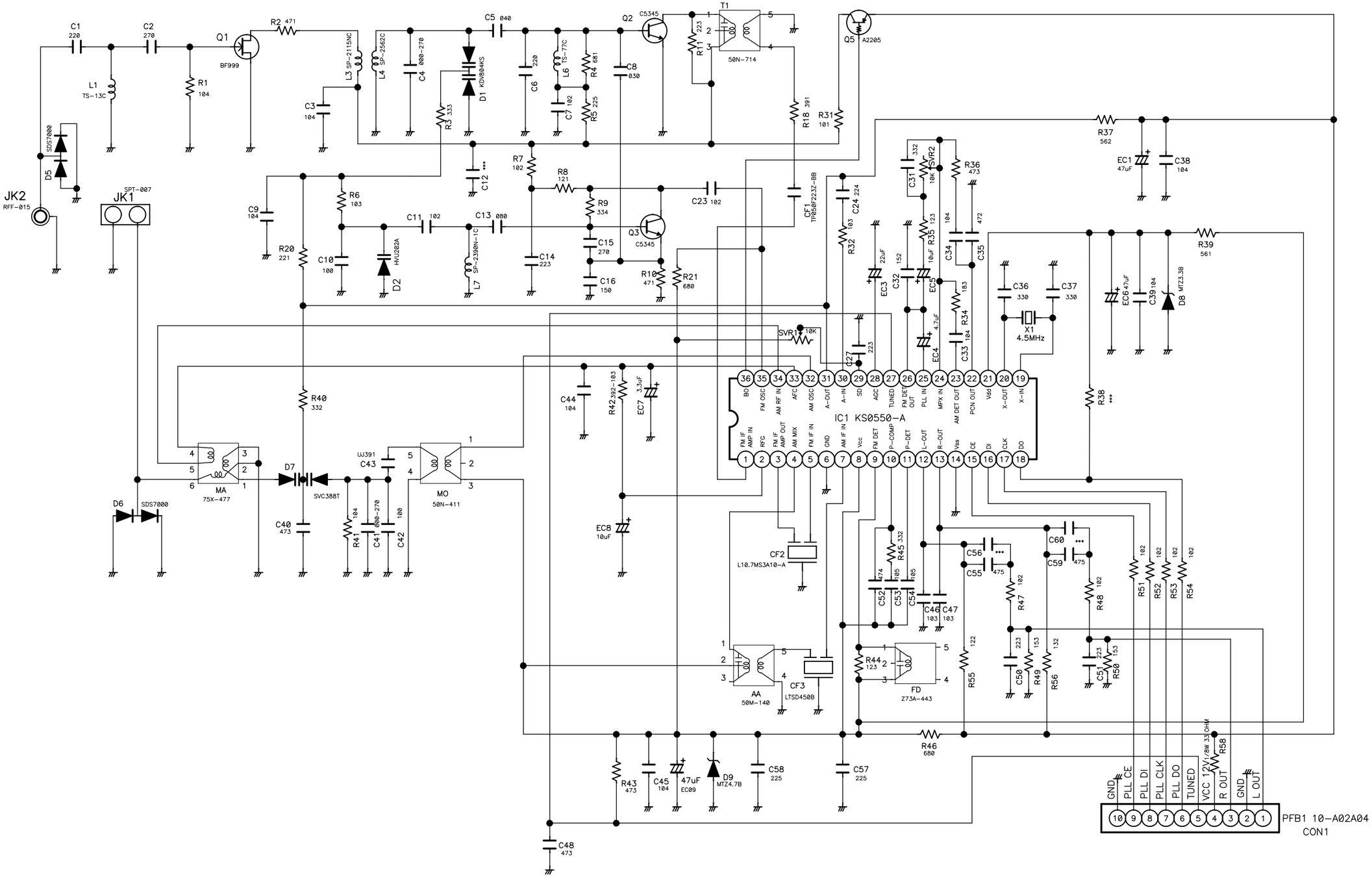
VERSION OPTION				
MODEL	FUSE101	FUSE102	R534	J500
USA	T6.3A/250V	T2.5A/250V	ADD	ADD
EUR	T3.15AL/250V	T6.3AL/250V	DEL	DEL
KOR	T3.15AL/250V	T6.3AL/250V	DEL	ADD
MULTI				

SCHEMATIC DIAGRAMS(2)

Model : RX-4105B/B



SCHEMATIC DIAGRAMS (3)

Model No.: RX-4105B/B

TUNER ASS'Y